THE PROVINCE OF
NEWFOUNDLAND,
CANADA

THE FISHING INDUSTRY TODAY

A Profile of
The Newfoundland Fishery
1986

HONOURABLE T. RIDEOUT
Minister of Fisheries

TABLE OF CONTENTS

PAGE

A. The Beginnings of the Newfoundland Fishery 1
B. The Fishery of Today and Tomorrow 4
C. Role of Government 8
D. Harvesting Sector 9
E. Processing Sector 17
F. Marketing 21
G. Support Services 23

A. THE BEGINNINGS OF THE NEWFOUNDLAND FISHERY

Fishing in the abundant waters surrounding the coasts of Newfoundland dates back to the early years of the sixteenth century. There is some suggestion that Europeans were fishing these waters even before this time, but the years of the sixteenth and seventeenth centuries provide an appropriate point of departure to begin an overview of the fishery which has developed along the east coast of Newfoundland and Labrador.

The Portuguese were fishing in Newfoundland waters by 1501, and French fishermen - Normans and Bretons - had appeared by 1504. French and Spanish Basques were also fishing for Newfoundland cod in the early 1500's. England, although it claimed title to the Island, found it more convenient to utilize other fishing grounds closer to home in the first half of the century; however, with the failure of their Iceland fishery at mid-century, an increasing number of British fishing interests turned their efforts towards exploiting the Newfoundland cod stocks. It seems certain that the Portuguese, French and Spanish, followed by the English, were the first to engage in the Newfoundland fishery.

The particular cure of dried and salted fish which the British favoured demanded sun and wind, and was not suited to any but a land-based curing operation. This fact alone does much to explain why, of all the nations that came to fish in Newfoundland waters, Britain would play the major role in populating the Island. As Keith Matthews explained:

> Newfoundland itself was of less value than the cod full waters surrounding her; and perhaps one of the main reasons why she finally became a British colony was that only that nation (with a portion of the French fishermen) was interested in the dry fishery which demanded possession of land onshore upon which to dry the fish.

Herein lies the key to the pattern of settlement that would develop in Newfoundland - the availability of the cod resource and the method used to exploit and process the resource.

Early British fishing activity in Newfoundland was centred predominatly along the North-East Coast.

> 1.
> From the beginning, the British fishery in Newfoundland appears to have been a migratory one, utilizing the inshore cod resource along the eastern Newfoundland coast, particularly that of the Avalon Peninsula.

The British returned to the coast to cure their catch, setting up their premises along the strip of shoreline stretching between Cape Freels in the north to Cape Pine in the south. Thus it is evident that the earliest British presence in Newfoundland was founded on their utilization of the Northern cod resource.

Figure A.1, following, depicting the summer settlement pattern in 1677, supports the fact that settlement was based on the fishery and in particular the Northern cod resource.

[1] C. Grant Head Eighteenth Century Newfoundland, Toronto, McClelland and Steward Limited and the Institute for Canadian Studies, Carleton University, 1976, p.XI.

Figure A.1 Summer Population, 1677

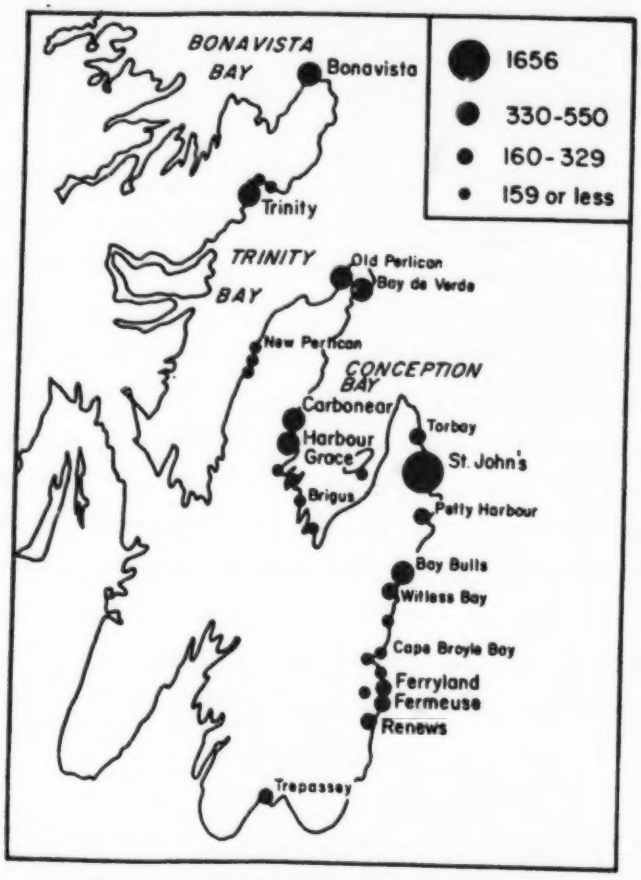


FIGURE A.I SUMMER POPULATION, 1677

Note: This section has been extracted from the NORDCO report, "The Place of Northern Cod in Newfoundland's Development".

B. THE FISHERY OF TODAY AND TOMORROW

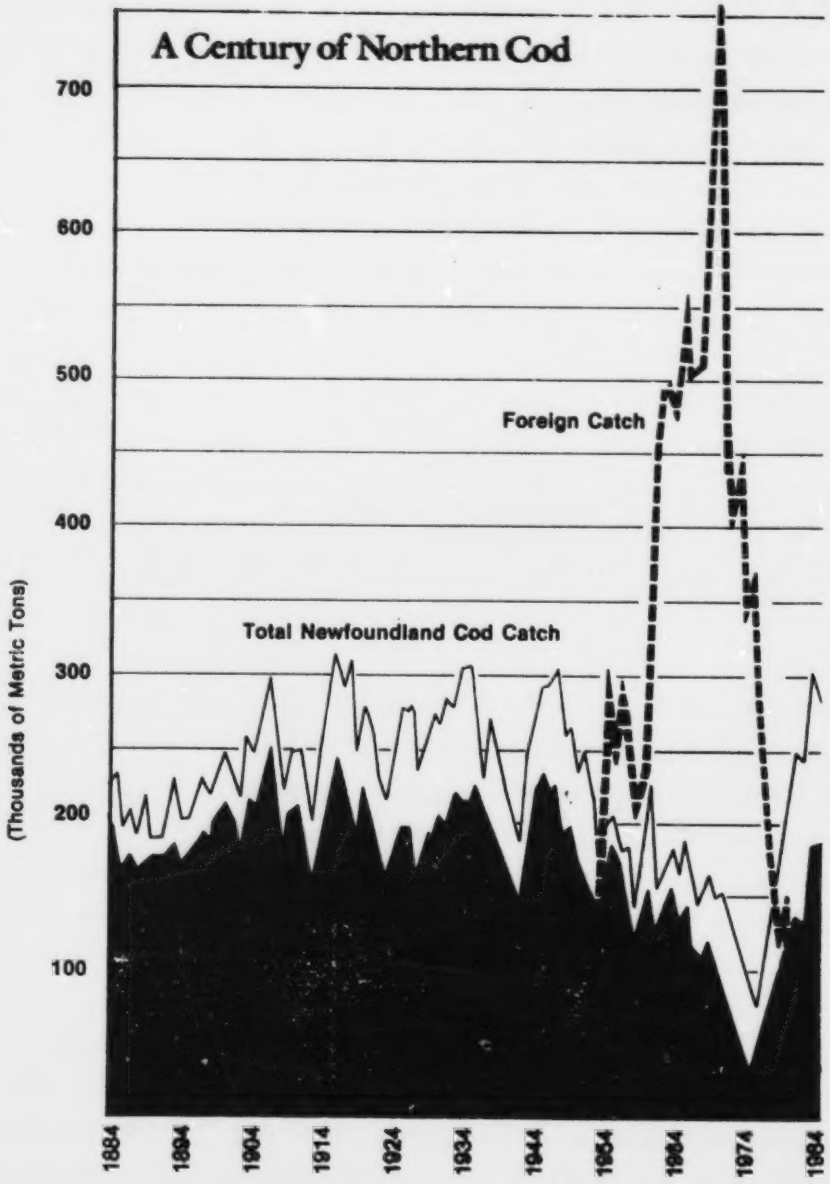
Despite the diversification of the Province's economy in the 20th century, the fishery has retained its importance. It represents for some 800 rural communities an "economic lifeline", and its performance in any year can determine the viability, and economic and social well-being of these communities.

Today harvesting is the source of employment for approximately 13,000 full-time and 10,000 part-time fishermen. The processing sector accounts for an additional 10,000 man years of employment, with 3,500 individuals working year round in processing plants supplied by the offshore fishery. The inshore fishery, with approximately 10,500 fishermen, normally makes up 50 percent of the total landed catch and accounts for 60 per cent of the total landed value. In recent years landings have ranged between 450,000 - 500,000 tons with a landed value in 1985 of $173 million and plant output value of approximately $500 million.

Additional employment is created in related industries. These industries are varied and include transportion, servicing and shipbuilding.

The Newfoundland fishery has witnessed many changes and innovations over four centuries, such as the introduction of the cod trap, the gasoline engine and refrigeration. None however had the impact of the very rapid build-up, and subsequent overfishing by foreign fleets of trawlers fishing on the Grand Banks and more northerly fishing grounds during the 1950's and 1960's. The impact was such that it threatened the very existence of the inshore cod fishery. In 1959, Newfoundland inshore fishermen caught 160,000 tons of Northern cod alone, by 1974 the catch had fallen to only 34,000 tons. This decline is clearly illustrated in Figure B-1.

Figure B-1 A Century of Northern Cod Harvest 1884-1984



This threat, it appeared, was alleviated when Canada responded to overfishing, as did other nations, by extending its jurisdictions by the declaration of a 200-mile fishing zone. In the case of Newfoundland, the 200 mile limit did not cover the nose and tail of the Grand Banks with the result that overfishing still continues.

The Newfoundland fishery, despite continued overfishing has experienced a significant increase in both the volume of landings and the export value of processed fish since 1977. In the harvesting sector, there is a continued emphasis on catching all available species, adopting new fishing methods and utilizing modern fishing vessels, equipment and gear. The processing sector has expanded and diversified from an emphasis on saltfish to fresh, frozen and other utilizations. Emphasis is being placed on upgrading products, secondary processing and quality control to help improve Newfoundland's position in the international market place.

During the period 1981 to early 1985, the fishing industry experienced a cost-price squeeze due, in part, to high interest rates. The offshore sector underwent a major restructuring and many small and medium-sized companies experienced cash flow difficulties.

A number of factors over the past two years have had a positive effect on the provincial fishery. A decline in interest rates, improved markets and a favorable depreciation of the Canadian dollar vis-a-vis the U.S. dollar, have strengthened our local fishery. Over the short term these favorable developments should lead to improved profitability and a stronger fishing industry.

The number of fishermen is not expected to increase greatly over the next few years. Emphasis has instead been placed on the allocation of certain species to match the effort and plant capacity with the resource. This policy is designed to increase the income of the average fishermen to enable him to meet the high capital costs now associated with modern fishing operations and enable all plants to return to profitability.

There is also increasing emphasis being placed on the development of a new type of fishing fleet. On September 20, 1985, the Newfoundland Government announced a program aimed at

developing a middle distance fleet of vessels to promote a Newfoundland based hook and line fishery in the middle and offshore areas of our 200 mile economic zone. The advantages of introducing such a fleet have been considered for a number of years and were most recently outlined in a report by the Task Force on Atlantic Fisheries. The Task Force concluded that such a fleet represented the only existing technology that could improve the economic viability of the industry, and simultaneously provide both a high level of employment and a reasonable level of income for fishermen.

Middle distance vessels are capable of helping the development of the fishery in several ways:

1. They are capable of operating year round, which in turn should reduce the seasonality of many fish plants and increase their viability.

2. They are capable of delivering higher quality and usually larger fish, for which a market preference exists.

3. They are able to operate in an energy efficient manner as longlining expends less energy than alternative methods of fishing.

These factors should lead to higher margins for both fishermen and processors, and should reduce the seasonal nature of the industry. These vessels are expected to play an increasingly important role in the Newfoundland fishery.

C. ROLE OF GOVERNMENT

A primary objective of the Government of Newfoundland and Labrador is to ensure that the fish resources adjacent to the Province are allocated in a way that will permit areas with an historical dependence on these resources to reap the maximum potential economic benefit.

To help achieve this objective the Provincial Government has outlined a series of objectives to guide planning and development in the fishery.

These are:

1. To acquire a greater degree of Provincial control in the area of fisheries management.

2. To lengthen the season of both the inshore fishery and the dependent processing sector.

3. To develop the harvesting sector as a profitable and commercially viable entity in its own right.

4. To develop the potential that exists in Newfoundland and Labrador to play a leading role in Canadian fisheries technology.

5. To develop an internationally competitive processing sector and to increase employment through the expansion of secondary processing.

6. To plan and develop a marketing strategy with the private sector and Federal Government to compete effectively in an increasingly tight world market to develop an image of Newfoundland fish as premium quality products.

7. To develop new training facilities and programs, through which new methods and ideas to increase harvesting efficiency and improve safety standards at sea can be implemented.

The ability of the Province to achieve these objectives is presently limited. The Federal Government currently holds almost exclusive control over the resource, the licencing of fishermen and fish allocation. The Province has advanced a constitutional amendment to exact concurrent jurisdiction as long-term planning is difficult under the existing regime.

D. HARVESTING SECTOR

The inshore fishery operates from early spring to autumn in most areas of the Province. It is based upon many species and is pursued by both full and part-time fishermen.

The fishery itself can be subdivided into three basic components:

1. Groundfish fishery
2. Pelagic fishery
3. Crustacean or shellfish fishery

Groundfish are those species, like cod and flatfish, which spend their life close to the ocean floor. Pelagic species, by comparison, are generally found near the ocean's surface. The most valuable pelagic species are capelin, herring and mackerel. Salmon also swim near the surface but it is referred to as an anadromous species as it spends its life between fresh water and salt water. Then there are the shellfish which break down into two groups. The crustaceans have hard shells and the most important species to the Newfoundland industry are lobster, shrimp and crab. The squid is also a shellfish but it belongs to the mollusc family. It, like the octopus, has a soft body.

Cod:

The cod fishery represents the life-blood of the inshore fishery. It is based mainly on the Northern cod stocks and secondly on the Gulf and Grand Bank stocks. Harvesting occurs throughout the year by a variety of methods.

The cod trap fishery begins in early June along most areas of the east and south coasts of the Province. It coincides with the inshore migration of cod from the Northern stocks and the Grand Banks. It is an intense fishery of six weeks duration carried out primarily by trap skiffs in the 25 foot to 33 foot range.

The cod trap is an old technology but a very effective one. It requires no more than three men to operate nowadays with the use of synthetic twines.

Gillnets are also used to catch cod. While punts and even dories are used, the gill net is generally fished by Newfoundland longliners which range from 35 feet to 65 feet in water depths of 100 fathoms and greater; there are six feet in a fathom. The gillnet which is also used to catch turbot and flounder is fished along the entire coast of Newfoundland and Labrador.

The principal method of harvesting cod offshore is the otter trawl. However this trawl, which is towed behind the vessel, is also used extensively in the South-West Coast winter fishery and in the Gulf of St. Lawrence by vessels of no more than 45 feet. It is a non-discriminating gear in that it catches all species of fish which wander into its path.

Following the codtrap fishery, cod is harvested by other means. On the Avalon Peninsula there is a fairly intensive baited trawl/hook and line fishery while in other areas gillnets are utilized in combination with the hook and line gears.

In the future it is possible that cod will be farmed in much the same manner as trout, salmon and hundreds of other species in dozens of countries around the world.

While cod accounts for more than one-half of total fish landings in Newfoundland, the other fisheries are of considerable importance.

Other Groundfish:

Amongst other groundfish, Greenland halibut (turbot) and flounder are the two most important to the inshore fishery. However the lumpfish roe fishery, as a result of development efforts by the Province's Department of Fisheries, has gained in

importance and there are areas of the Province where the potential is undetermined. The roe is processed into a caviar, which is sold in speciality stores in Europe and North America.

Herring:

The herring fishery begins in April, with the opening of the spring herring fishery. It is fished in most areas of the Province by both fixed and mobile gear fishermen. There is a fall herring fishery in addition to the spring fishery.

Mackerel:

This fishery occurs in the Gulf and along the East and Northeast coasts during mid-summer and autumn. It is pursued by both open-boat fishermen using fixed gear and bar seines and longliner fishermen with purse seines.

Capelin:

The capelin fishery occurs along the East and Northeast Coasts as well as the southern Avalon Peninsula in early June. It is pursued by both open-boat fishermen using traps and seines, and longliner fishermen utilizing mobile purse seines.

Salmon:

The commercial salmon fishery opens in early June and can run into mid summer or early September. It is conducted on a Province wide basis, utilizing surface set gillnets perpendicular to the shore. The fishery is normally pursued in conjunction with other open-boat inshore fishing activities and is closely regulated by restricted entry licencing and seasons. The recreational lobby is a threat to the future of this fishery.

Lobster:

Beginning in mid-April the lobster fishery runs to mid-July. This fishery occurs throughout the Province, with the exception of the Labrador Coast and the east side of the Great Northern

Peninsula. It is pursued almost entirely by open boats in the 18'-24' range, and is subject to restricted entry licencing, individual trap limits and seasons.

Crab:

The crab fishery takes place primarily off the Avalon Peninsula and the East and Northeast Coasts from early spring to mid-autumn. Normally caught in pots, the effort is confined to a mostly single-purpose fleet composed of decked vessels in the 45-65 foot range.

Squid:

The squid fishery, depending on the appearance of this species inshore, is a mid-summer/autumn fishery carried out along the East and Northeast Coasts primarily by open boat fishermen. The harvesting effort is aimed at both fresh frozen and dried production.

The Labrador Fishery:

The Labrador fishery follows a similar pattern to that of the inshore fisheries around the island. However, because of weather conditions it usually lasts four months; from late spring to early autumn. The major effort is aimed at the cod, salmon, and Arctic char fisheries of Northern Labrador. In recent years a new longliner groundfish fishery has been developing in the Smokey to Nain region, primarily as a result of the presence of longliners from the island portion of the province.

The Offshore Fishery:

The offshore fishery, operating on a year round basis, produces approximately 50 percent of the total volume and 40 percent of the value of fish landings. In Newfoundland there are two main companies operating offshore; Fishery Products International Limited and National Sea Products which, between them, operate more than seventy deep-sea trawlers. There is also a small trawler company operating from Harbour Grace.

Those trawlers are about 150 feet in length and carry crews of twelve to fifteen men. Their normal voyage is ten days at sea, followed by a two day turn-around. They fish for groundfish species, only, upwards to 200 miles offshore and often much further from their home ports of Marystown, Grand Bank, Fortune, Trepassey, St. John's, Catalina, and other towns.

The main groundfish species taken by those trawlers are cod, redfish and the flatfish species, of which American plaice is the most important.

It should be noted that the Grand Banks traditionally provided the focus for the Province's offshore fishing activity. However, stock depletion due to indiscriminte overfishing outside the Canadian 200 mile economic zone, forced attention to shift northward to the more lucrative Northern cod stocks.

HARVESTING STATISTICS

Average Landed Volume/Values 1980-85

Total Average Volume 478,000 metric tons
Total Average Value $161 million

Number of fishermen 1985

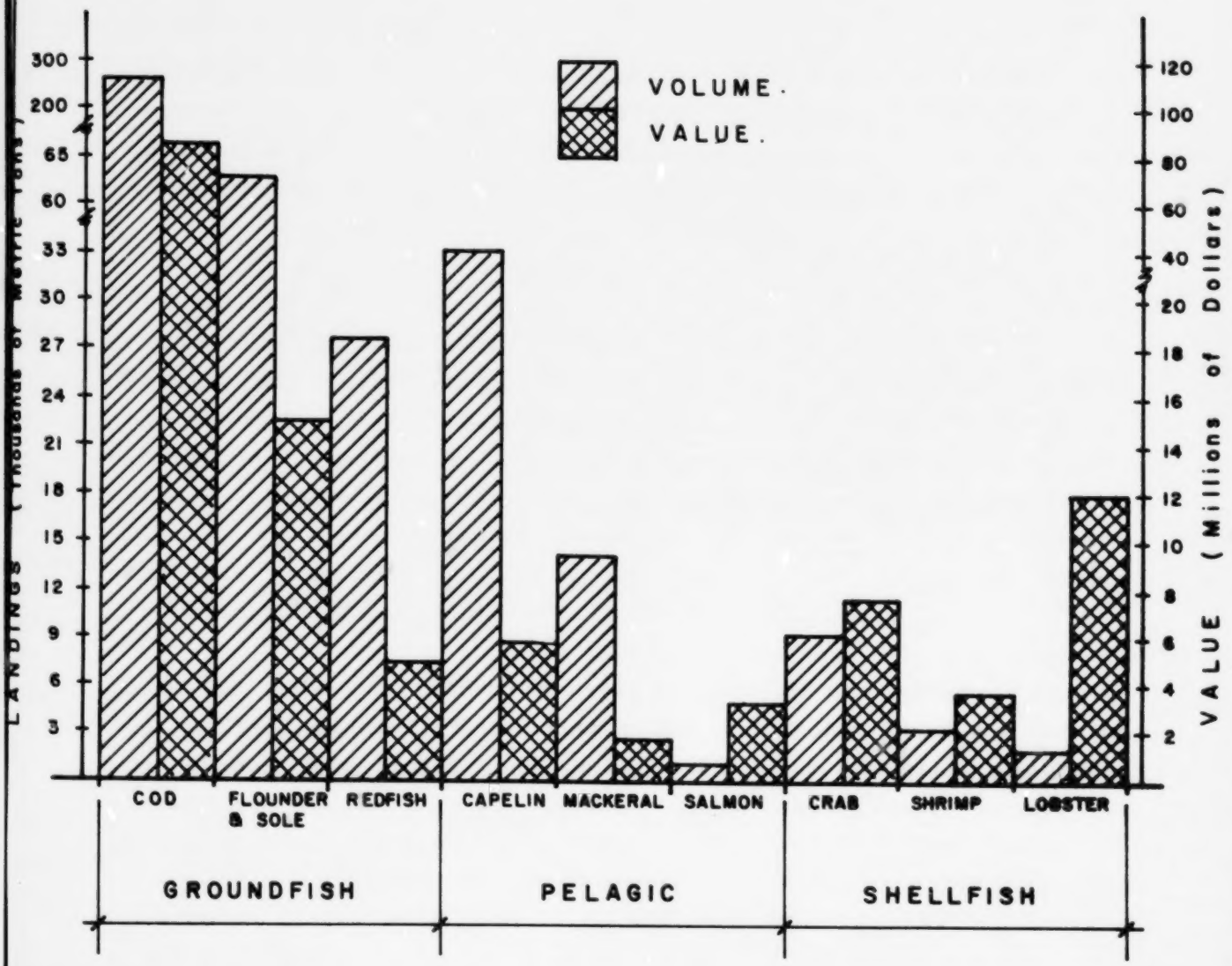
Full-time	13,324
Part-time	13,291
TOTAL:	26,615

Number of fishing vessels by size 1985

0 - 20 ft.	- 8035	(many owned by part-time fishermen)
20 - 31 ft.	- 6311	
35 - 65 ft.	- 1314	
65 ft. +	- 98	
TOTAL:	15,758	

HARVESTING STATISTICS

Volume and Value of Fish Landings
by Species Group - Newfoundland - 1985



E. PROCESSING SECTOR

The processing sector is comprised of over 220 plants, with approximately 75 engaged in frozen groundfish processing. The annual export value of products produced in these facilities has reached $520 million annually.

There are 12 trawler-fed plants located mainly on the South Coast and Northern Coast, owned by Fishery Products International and National Sea Products, operating generally on a year-round basis. The remainder are seasonal inshore plants operating in response to local resource availability. To extend the season for some of the larger inshore groundfish processing plants a number of initiatives, such as the Resource Short Plant Program and Middle Distance Vessel Program have been undertaken.

Although the main emphasis is in groundfish production, principally cod, a number of plants are engaged in the processing of pelagic and shellfish species. In the majority of cases, pelagic and shellfish processing is integrated with groundfish processing. Saltfish, despite its decline over the years, continues to remain an important part of the processing sector. Presently, there are more than 35 registered saltfish processing plants, generating export revenues in excess of $35 million annually. A similar number of plants also serve as feeder operations to fully integrated freezer operations.

The bulk of production from groundfish and pelagic species is in the form of frozen fillet packs and frozen blocks. Canning operations are small and sell mainly to domestic markets. Secondary processing is growing with significant levels of production in several operations. In the past few years, in response to changing market demands, increased emphasis has been placed on fillet pack production and away from blocks.

With the exception of Fishery Products International and National Sea Products, most plants are family owned and operated. There are perhaps 10 multi-plant companies and most of these are confined to 2 or 3 plants. Overall, the processing sector is generally well organized with most of the medium to larger size plants belonging to mutual interest organizations.

With an increased sensitivity to market demands and ongoing developments in processing and product technology it is expected that the processing sector will undergo further changes over the next decade, especially in relation to product mix.

PROCESSING SECTOR STATISTICS

NUMBER/TYPE OF PROCESSING FACILITIES, 1984

Freezing - 93

Feeder - 40

Squid - 17

Saltfish - 38

Other - 33

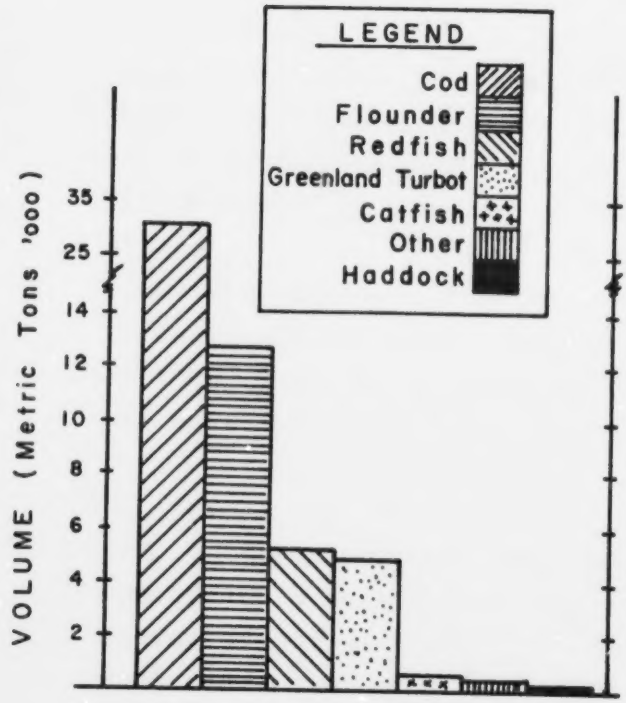
Total 221

PROCESSING SECTOR EMPLOYMENT

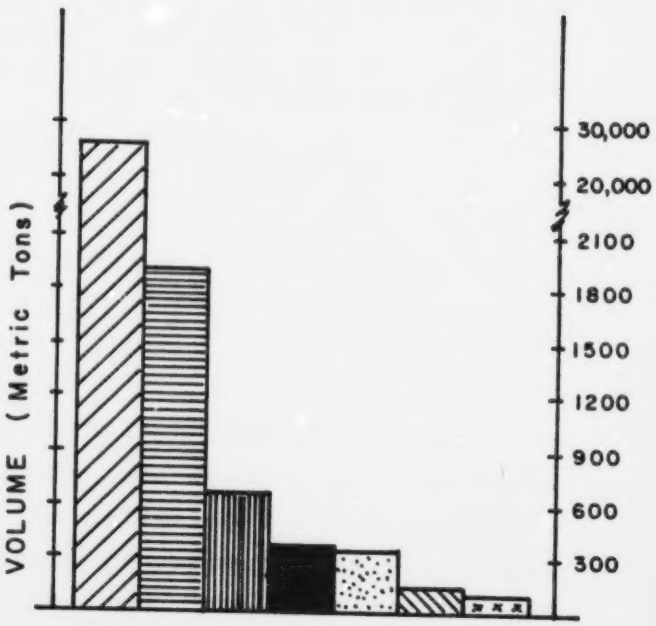
Average employed - 9,600

Peak employment - 13,000

Frozen Fillet and Block Production by Species, 1985



FROZEN FILLET PRODUCTION BY SPECIES.



FROZEN BLOCK PRODUCTION BY SPECIES.

F. THE MARKETING SECTOR

Canada is the world's largest exporter of fish, and fish ranks with iron ore, crude oil and wheat among Canada's commodity exports. Exports are mainly to the United States followed by Japan, Puerto Rico, and the United Kingdom. Portugal and Puerto Rico are principally importers of saltfish, while the United Kingdom primarily purchases frozen cod. Japan imports a range of products with capelin and squid being the most important. The potential also exists in the Japanese market for redfish, herring, shrimp and roe to assume a larger position.

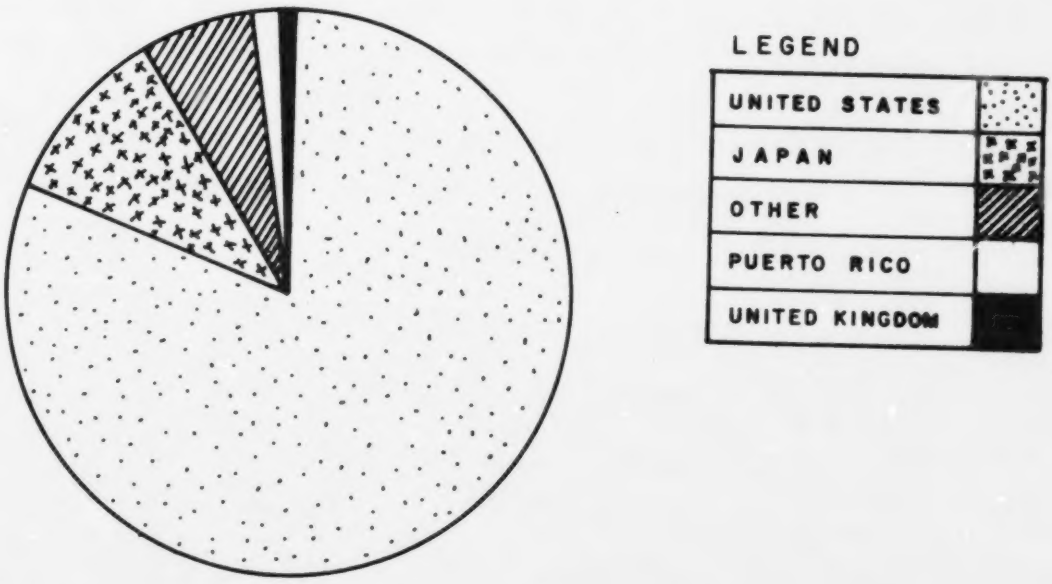
Until the early 1970's marketing was fractionalized. This began to change in 1972 however, with the establishment of the Canadian Saltfish Corporation. The success of this Agency, as the sole marketer of saltfish, has gradually led to increased cooperation amongst the producers. In the past two to three years, in particular, there has been increased marketing coordination in the fresh frozen sector. The amalgamation of three deep-sea companies under the 1983 Federal/Provincial Fisheries Restructuring Agreement has also led to a single marketing agency for this sector. Many smaller companies have recently either become members of marketing oriented organizations or formed consortia such as the Seafood Exporters Consortium and the Bayshore Group.

Projected increases in fish landings and the continuing effort to increase the production of specialized products represents a significant challenge in marketing for the fisheries sector of our economy. The Department of Fisheries is supporting measures to diversify markets both from the destination and product perspectives.

TOTAL EXPORT VALUE OF NEWFOUNDLAND FISH PRODUCTS
1981-1985 ($ MILLION)

1981	457
1982	504
1983	500
1984	349
1985	520

PERCENTAGE DISTRIBUTION OF NEWFOUNDLAND EXPORTS BY COUNTRY FOR 1984.



G. SUPPORT SERVICES

Fishing is more than catching, processing and selling fish. It is a resource industry and, not unlike mining, agriculture and forestry, it employs people in the manufacture of goods and in servicing the fishing fleet and fish plants throughout the Province. Vessels must be built and engines repaired. Fish plants need trucks to deliver fish and later bring the final product to market. The fishery is a big industry - the largest one in Newfoundland and Labrador.

The Government of Newfoundland and Labrador complements private enterprise. It constructs fish handling facilities, supplies ice to fishermen, constructs access roads to fisheries facilities and operates twenty Marine Service Centres which cater to the needs of vessels from 35 feet to 65 feet. Service Centres provide haulout and launching equipment, off-season vessel storage, inside vessel repair accommodations, fully stocked supply rooms and fishermen meeting centres.

In addition to these, and many other support services the Department of Fisheries undertakes a wide range of programs to improve the viability of the harvesting and processing sectors, and promote Newfoundland seafood products. Then there is the Fisheries Loan Board which assists the development of the inshore fishery by providing low interest loans and bounties and provides technical advise and inspection service to fishermen.